



Amalgam Waste Best Management Practices

Dental clinics generate relatively small quantities of hazardous and non-hazardous wastes in many forms that can contain mercury, silver, lead, and other substances. However, collectively these wastes can have significant impacts on the environment. Proper management of dental wastes is regulated by the State of Colorado and is an important, necessary, and valued practice at dental offices. Guidelines from the American Dental Association (ADA) recommend that dentists recycle amalgam in all of its forms during dental procedures.¹

Amalgam waste and our environment

Placement and removal of amalgam restorations create amalgam waste that is approximately 50 percent mercury. Although the mercury in amalgam is in a stable form, proper recycling of amalgam waste prevents the release of mercury into the environment. Types of amalgam waste in a dental office that can be recycled include *contact* and *non-contact* amalgam.

Contact amalgam

- Extracted teeth with amalgam fillings
- Amalgam pieces from restorations
- Amalgam pieces captured at chairside
- Amalgam captured at chairside traps
- Vacuum pump filter contents
- Amalgam separator sludge

Non-contact amalgam

- Empty amalgam capsules
- Excess unused amalgam mix



Discarding amalgam waste with “red bag” or infectious waste can cause release of toxic mercury vapor, since most infectious waste is incinerated. Locally, amalgam waste that goes down the drain is mostly extracted by wastewater treatment plants in biosolids and applied to land, while the rest passes through and is discharged to our creeks. If not properly handled at the dental office, the mercury from amalgam waste pollutes our environment.

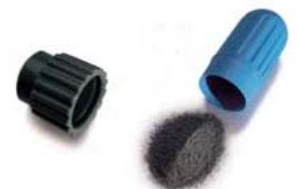
Steps when managing and recycling amalgam waste

- Always wear safety glasses, a mask, and gloves when handling amalgam.
- Always place amalgam waste in labeled wide-mouthed, airtight, plastic containers, and ensure that the container is tightly sealed at all times.
- Follow your recycler’s instructions for packaging and shipping of waste.
- Recyclers may allow you to place all amalgam waste, including capsules, non-contact amalgam, contact amalgam, traps, filters, and teeth, into the same waste container.
- Never put amalgam waste into the wastewater system, biohazard bag, or trash.



Amalgam capsules

1. If using amalgam capsules, maintain stock in a variety of sizes to reduce waste.
2. Place empty and non-empty capsules into the amalgam waste container.



Scrap amalgam

1. Place non-contact scrap amalgam into the amalgam waste container.
2. Many recyclers will buy this clean scrap if placed in a separate container.
3. Salvage and recycle amalgam pieces from restorations after removal.



Chairside traps

1. If disposable, remove the trap and place into the amalgam waste container.
2. If reusable, remove the trap and empty the contents into amalgam container.
3. If the dental chair is only used for hygiene, place the trap into the trash bin.
4. Do not rinse the trap under running water.



Vacuum pump filters

1. Change vacuum filters in accordance with the manufacturer's recommendations, or at least once a month.
2. If disposable, place the lid on the filter and put the entire filter in the amalgam waste container.
3. If reusable, let sit over night, then decant the liquid portion, and place the sludge into the amalgam waste container; do not rinse the trap over the sink.



Extracted teeth containing amalgam

1. Disinfect extracted teeth that contain amalgam restorations.
2. Do not use chlorine or bleach; instead use glutaraldehyde or 10% formalin.
3. Place extracted teeth containing amalgam into the amalgam waste container.
4. Do not use heat to disinfect teeth or any item containing amalgam.



Amalgam separator sludge

1. Change the canister or separator in accordance with the manufacturer's instructions.
2. Recycle sludge through your separator manufacturer, supplier, or amalgam recycler.



Evacuation line cleaners

1. Use line cleaners that do not contain bleach or other chlorine compounds.
2. Bleach dissolves amalgam and releases mercury. To see a list of safe cleaners, see the Environmentally Preferable Evacuation Line Cleaners resource sheet.



What amalgam waste services should my recycler provide?

- Your service provider should recycle the mercury or send it off to a licensed recycler, as this practice is recommended by the ADA. Some haulers instead send the amalgam waste to a hazardous waste landfill for disposal; ask your service provider.
- Your recycler should be able to accept all types of amalgam waste mentioned above that your office generates.
- Ask your recycler if all of the amalgam wastes can be packaged in the same container and if disinfection is required for any of the amalgam wastes.



Is there a list of amalgam waste recyclers?

- Yes. Check out the "X-Ray Waste & List of Waste Haulers" resource sheet for a list of local and national dental waste recyclers that service our community.

Company Name	Address	City	State	Zip	Phone	Fax	Website
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References:

[1] Best Management Practices for Dental Waste, ADA, Sep. 2005. www.ada.org/prof/resources/topics/amalgam_bmp.asp

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